AMENDMENTS TO THE CLAIMS:

Please replace the claims with the following rewritten listing:

1. – 51. (Cancelled)

52. (Currently Amended) Apparatus for monitoring muscle activity so as to detect a particular muscle activity and to distinguish the occurrence of said particular muscle activity from the occurrence of at least one other muscle activity, said apparatus comprising

- means for providing signals indicative of muscle activity, [,]
- means for processing of said signals in order to detect said particular activity, and
- means for providing a feedback signal,

wherein said apparatus is operable in a set-up mode and in a use mode, said set-up mode being distinct from said use mode,

and wherein, in said set-up mode, said apparatus is user controllable to receive as a first reference input signals from said means for providing signals which are indicative of said other muscle activity and to separately receive second reference input signals from said means for providing signals which are indicative of said particular muscle activity,

and wherein said apparatus is configured in said set-up mode to process said first reference signals and said second reference signals to identify therefrom at least one distinguishing criterion which differentiates said first reference input signals from said second reference input signals,

and wherein in said use mode said apparatus is configured to provide said feedback signal in response to detecting presence ~~of~~ in signals received from said means for providing signals of said at least one distinguishing criterion identified in the set-up mode ~~in signals received from said means for providing signals~~.

53. (Previously Presented) Apparatus according to claim 52, wherein said apparatus is configured in said set-up mode to process said first reference signals and said second reference signals to identify therefrom as said distinguishing criterion at least one

frequency in said signals, the amplitude of said signals at which frequency differentiates said first reference input signals from said second reference input signals,

and wherein in said use mode said apparatus is configured to provide said feedback signal in response to detecting in the provided signals at least a predetermined amplitude at said at least one frequency identified in the set-up mode.

54. (Currently Amended) Apparatus according to claim 52, wherein, in said set up mode, said apparatus is user controllable to receive as said second reference input signals from said means for providing signals which are indicative of an essentially maximal muscle activity~~,~~.

55. (Currently Amended) Apparatus according to claim 52, wherein, in said set-up mode, said apparatus[(-)] is user controllable to receive as said first reference input signals from said means for providing signals which are indicative of a said other muscle activity which is a normally occurring muscle activities, such as producing one or more grimaces.

56. (Previously Presented) Apparatus according to claim 52, wherein said apparatus comprises means for registering and storing said signals indicative of muscle activity during a time interval.

57. (Previously Presented) Apparatus according to claim 52, wherein said apparatus is adaptable by having means for adjusting the intensity of said feedback signal.

58. (Previously Presented) Apparatus according to claim 52, wherein said means for processing of said signals in order to detect a particular activity comprises means for pattern recognition.

59. (Previously Presented) Apparatus according to claim 52, wherein said means for providing signals indicative of muscle activity comprises one or more electrodes for sensing of EMG-signals.

60. (Previously Presented) Apparatus according to claim 52, wherein said means for providing signals indicative of muscle activity comprises one or more electrodes for sensing of EEG-signals.

61. (Previously Presented) Apparatus according to claim 60, wherein said apparatus comprises means for testing said electrodes and in particular the connectivity to the user by supplying a test voltage or test current to one or more electrodes, measuring the resulting current or required voltage and comparing the result with reference value(s).

62. (Previously Presented) Apparatus according to claim 52, wherein said means for providing signals indicative of muscle activity comprises a microphone, a sensor for sensing of vibrations and/or other sensor means.

63. (Previously Presented) Apparatus according to claim 52, wherein said apparatus comprises means for storing data corresponding to measured and/or processed signals.

64. (Previously Presented) Apparatus according to claim 63, wherein the apparatus further comprises a computer and means for transferring stored data thereto.

65. (Previously Presented) Apparatus according to claim 52, wherein said apparatus comprises a user module for wearing on the head.

66. (Previously Presented) Apparatus according to claim 52, wherein said apparatus comprises a slave module and a master module, said slave module being designed for wearing by a human being.

67. (Previously Presented) Apparatus according to claim 52, wherein said apparatus comprises display means for displaying instructions and/or results stemming from a monitoring session.

68. (Previously Presented) A method for monitoring muscle activity so as to detect a particular said muscle activity and to distinguish the occurrence of particular muscle activity from the occurrence of at least one other muscle activity, said method comprising

- receiving signals indicative of muscle activity,
- processing said signals in order to detect said particular activity, and
- providing a feedback signal,

wherein said apparatus is operated in a set-up mode and in a use mode, said set-up mode being distinct from said use mode,

and wherein, in said set-up mode, said apparatus is user controlled to receive as a first reference input signals from said means for providing signals which are indicative of a said other muscle activity and to separately receive as a second reference input signals from said means for providing signals which are indicative of said particular muscle activity,

and wherein said apparatus is configured in said set-up mode to process said first reference signals and said second reference signals to identify therefrom at least one distinguishing criterion which differentiates said first reference input signals from said second reference input signals,

and wherein in said use mode said apparatus is configured to provide said feedback signal in response to detecting in the provided signals said at least one distinguishing criterion identified in the set-up mode.

69. (New) A method as claimed in claim 56, wherein said registered and stored signals indicative of muscle activity are processed by FFT analysis.